## ABUSE AND NEGLECT IMPAIR ATTACHMENT

## <u>The Effects of Deprivation During Time Sensitive Brain Development Begin In Utero</u> and Continue Into the Twenties

"The human brain mediates all human behavior – aggression, violence, fear, ideology – indeed all human emotional, behavioral, cognitive and social functioning... As the brain develops and the sub-cortical and cortical areas organize, they begin to modulate and 'control' the more primitive and 'reactive' lower portions of the brain. With a set of sufficient motor, sensory, emotional, cognitive and social experiences during infancy and childhood, the mature brain develops — in a use-dependent fashion — a mature, humane capacity to tolerate frustration... The most dangerous children are created by a malignant combination of experiences. Developmental neglect and traumatic stress during childhood create violent, remorseless children. This is characterized by sensitized brainstem systems (e.g., serotonergic, noradrenergic and dopaminergic systems). Dysregulated brainstem functions (e.g., anxiety, impulsivity, poor affect regulation, motor hyperactivity) are then poorly modulated by poorly organized limbic and cortical neurophysiology and functions (e.g., empathy, problem-solving skills) which are the result of chaotic, undersocialized development. This experience-based imbalance predisposes to a host of neuropsychiatric problems and violent behaviors."

See also Perry, Aggression and Violence: The Neurobiology of Experience. <a href="http://teacher.scholastic.com/professional/bruceperry/aggression\_violence.htm">http://teacher.scholastic.com/professional/bruceperry/aggression\_violence.htm</a> [as of January 17, 2012].